## **Contents of Volume 17**

No. 1

Photographic feature: Rock jointing at the Penmaenbach Headland, North Wales	ii
Waste Disposal	
G. BONNEY: Introduction: Waste disposal—where are we now?	1
C. J. Swinnerton: Protection of groundwater in relation to waste disposal in Wessex Water Authority	3
R. Holmes: Comparison of different methods of estimating infiltration at a landfill site in south Essex with implications for leachate management and control	9
C. BARBER & P. J. MARIS: Recirculation of leachate as a landfill management option: benefits and operational problems	19
H. ROBINSON: On-site treatment of leachate using aerobic biological treatments	31
G. M. WILLIAMS, C. A. M. ROSS, A. STUART, S. P. HITCHMAN & L. S. ALEXANDER: Controls on contaminant migration at the Villa Farm Lagoons	39
R. C. Harris & D. R. Lowe: Changes in the organic fraction of leachate from two domestic refuse sites on the Sherwood Sandstone, Nottinghamshire .	57
R. D. BARKER, J. W. LLOYD & D. W. PEACH: The use of resistivity and gamma logging in lithostratigraphical studies of the Chalk in Lincolnshire and South Humberside	71
J. C. Bliss & K. R. Rushton: The reliability of packer tests for estimating the hydraulic conductivity of aquifers	81
No. 2	
Photographic feature: Construction of a retaining wall in Hong Kong	ii
J. Pitts: A review of geology and engineering geology in Singapore	93
R. D. BARKER & D. HARKER: The location of the Stour buried tunnel-valley using geophysical techniques	103
M. E. Barton & B. J. Coles: The characteristics and rates of the various slope degradation processes in the Barton Clay Cliffs of Hampshire	117
M. R. Khawlie & H. I. Hassanain: Engineering geology of the Hammana landslides, Lebanon	137
A. A. FINLAYSON: Land surface evaluation for engineering practice: applications of the Australian PUCE system for terrain analysis	149

Discussion by K. A. Styles, E. W. Brand & A. D. Burnett; reply by R. J. Edwards	159
Discussion by R. A. Fox	163
Discussions by T. H. DOUGLAS, C. D. WARREN and A. M. PODHALICZ	165
Discussion by E. J. Wilson; reply by C. N. Edmonds	167
Book reviews	169
Proceedings of the Hydrogeological Group of the Geological Society, $1983$	175
No. 3	
Photographic feature: North Point Concourse excavation, Hong Kong	ii
G. I. Cottiss: Preliminary observations on the design and construction of a four-lane highway through expansive clay in Cyprus	179
The Engineering Geology of Tidal Rivers (Regional Meeting of the Engineering Group, Hull, 12–16 September 1983. Further papers from this meeting in No. 4.)	
J. R. Coffey: Construction in tidal rivers: an overview	193
R. W. Horner: The Thames tidal flood risk—the need for the barrier: a review of its design and construction	199
MARY P. KENDRICK: Impact of engineering structures on tidal flow and sediment distribution in the Thames	207
A. B. Hawkins: Depositional characteristics of estuarine alluvium: some engineering implications	219
D. A. Cook & M. R. Roy: A review of the geotechnical properties of Somerset alluvium using data from the M5 motorway and other sources	235
A. McGown & D. Miller: Stratigraphy and properties of the Clyde alluvium	243
I. M. Kirkpatrick & D. M. McCann: Engineering geological and geophysical investigation of the Barking Creek tidal barrier site	259
B. W. Conway, D. M. McCann, M. Sarginson & R. A. Floyd: A geophysical survey of the Crouch/Roach river system in south Essex with special reference to buried channels	269
M. S. FLETCHER & R. A. NICHOLLS: A buried valley in the Orwell estuary	283
Proceedings: Groundwater Development in Third World countries	289
No. 4	
Photographic feature: Colour enhanced infra-red photography of landslips The Engineering Geology of Tidal Rivers (continued from No. 3)	ii
P. H. McMur Avy Deep foundations in the Diver Hull	201

CONTENTS OF VOLUME 17 (continued)	vii
K. F. SIMM: Engineering solutions to geological problems in the design and construction of Humber Bridge	301
M. E. Barton & M. H. Roche: A geological appraisal of the site of the foundation failure of the giant oil tanks at Fawley, Hampshire	307
D. A. Greenwood: Re-levelling a gas holder at Rhyl	319
M. T. N. FINCH, F. H. HUGHES & R. A. KILNER: Vertical drains used to facilitate road construction for a Medway riverside industrial area	327
Neil Arber: A technical note on the design and construction of the Afon Ganol Valley section of the North Wales Coast Road (A55)	335
R. P. THOMPSON: Geotechnical aspects of Greenodd by-pass	339
R. T. Slocombe: Tunnelling through warp: an estuarine clay	349
S. A. Al-Jassar & A. B. Hawkins: Chemical soundness test on Carboniferous Limestone samples from the Bristol area	351
B. A. CHAPPELL, J. R. WILLIAMS & A. N. POLLARD: Stress and slabbing in massive rock	357
G. P. Daw: Application of aquifer testing to deep shaft investigations	367